

IN THE CLAIMS

Please cancel claims 1-64 without prejudice.

Please add new claims 65-72 as follows:

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65. A method for communicating between a plurality of transmitters and a receiver, said method comprising:

orthogonally encoding information signals at each transmitter, said orthogonally encoding comprising:

coding information signals at said transmitter to produce corresponding information

blocks containing coded information symbols;

repeating each information block a predetermined number of times according to a

predetermined spectrum-spreading factor;

orthogonally encoding said repeated information blocks by applying a modification factor to each repeat of said information blocks, the sequence of modification factors applied to successive repeats of said information blocks forming one of a set of mutually orthogonal coding sequences; and

transmitting said orthogonally encoded information signals from said plurality of transmitters.

66. The method according to claim 65 further comprising decoding said orthogonally encoded information signals by employing different orthogonal codes respectively for separating the information blocks corresponding to different information signals into corresponding separate channels.

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CONT

67. The method of claim 66 wherein decoding said orthogonally encoded information signals comprises removing orthogonal encoding from said encoded information blocks and adding corresponding ones of said information symbols in repeated information blocks.

68. The method according to claim 67 wherein removing said orthogonal encoding from said encoded information blocks comprises forming a summed signal for each symbol within the repeated information blocks and processing the summed signal with an equalizer.

69. The method of claim 65 wherein applying a modification factor to each repeat of said information blocks comprises imposing a sequence of phase changes onto said repeated information blocks.

70. The method of claim 65 wherein applying a modification factor to each repeat of said information blocks comprises imposing a sign change on said repeated information blocks.

71. A receiver to receive a transmitted signal comprising repeated information blocks that have been orthogonally encoded, said receiver comprising:

a receiver circuit to receive an orthogonally encoded information signal comprising at least one repeated information block; and  
a decoder to decode said orthogonally encoded repeated information block.

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CONT

72. The received of claim 71 wherein said decoder comprises:  
an orthogonal code remover from removing the orthogonal encoding from said repeated  
information blocks; and  
an adder for adding corresponding ones of said symbols in said repeated information  
blocks after the orthogonal encoding is removed by said orthogonal code remover to  
form a summed signal for each symbol within said repeated information blocks.

Respectfully submitted,

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